Fig. 1

Fig. 2a

```
      ╭───────────────╮
      │  PLICS-sensors │
      │  start sensor  │
      │    search      │
      ╰───────┬───────╯
              │
      ┌───────┴───────┐
      │ interrupt sensor │──── 10
      │    supply        │
      └───────┬───────┘
              │
              │◄──────────────┐
              ▼               │
         ◇───────────◇        │
        ╱             ╲──no──┘
        ╲ current = 0mA╱
         ◇─────┬─────◇──── 11
               │
              yes
               │
      ┌────────┴────────┐
      │ switch on current │──── 12
      │     supply        │
      └────────┬────────┘
               │
               ▼                    13
         ◇───────────◇
        ╱ current > short╲              ╭──────────────╮   [dialog 1 or 2
        ╲      or         ╱──yes──►│  E014 / E015  │
         ╲   < 3,6mA     ╱              ╰──────────────╯
         ◇──────┬──────◇                      │
                │                            14
               no
                │
      ┌─────────┴─────────┐──────────────────────────┐
      │ switch sensors over │                          │
      │   to multidrop,     │──── 15                   │
      │   to adress 15      │                          │
      │ (CMD 6 with addr. 0)│                         yes
      └─────────┬─────────┘                           │
                │                                      │
                ▼          16                          │
         ◇───────────◇                    ◇───────────◇
        ╱ is measured  ╲                 ╱ is measured ╲        18   ╭──────────────╮  [dialog 2
        ╲ current       ╱──no──►╲ current not ╱──no──►│   E015       │
         ╲ a multiple   ╱                 ╲ equal to    ╱        │ no sensor    │
          ╲ of 4mA?    ╱                  ╲   0mA?     ╱         │ connected    │
          ◇─────┬─────◇                    ◇─────┬─────◇         ╰──────────────╯
                │                                │
               yes                              17
                │
      ┌─────────┴─────────┐
      │ determine number of │──── 19
      │ connected sensors   │
      │ (measured current / │
      │      4 mA)          │
      └─────────┬─────────┘
                │
                ▼
```

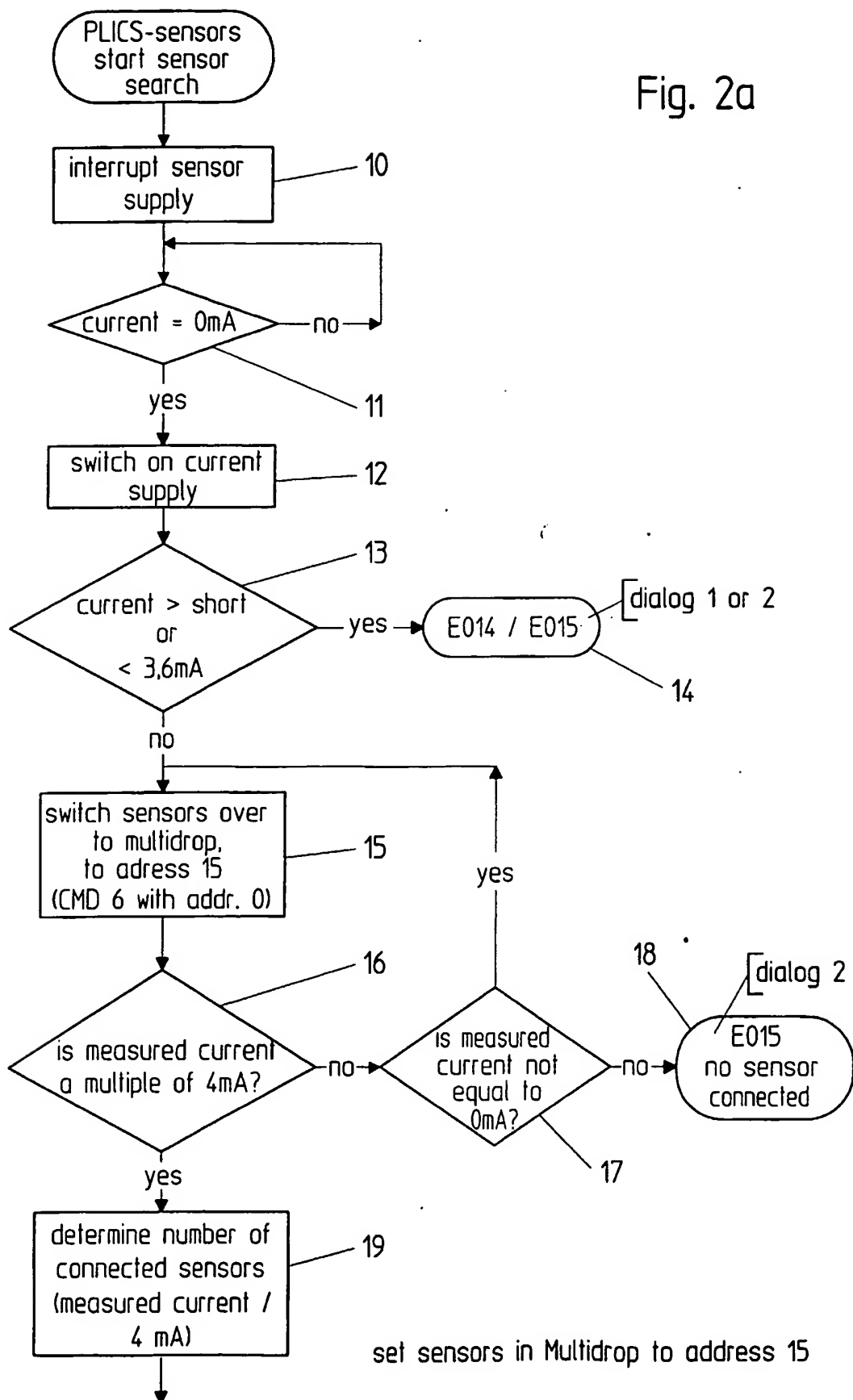set sensors in Multidrop to address 15

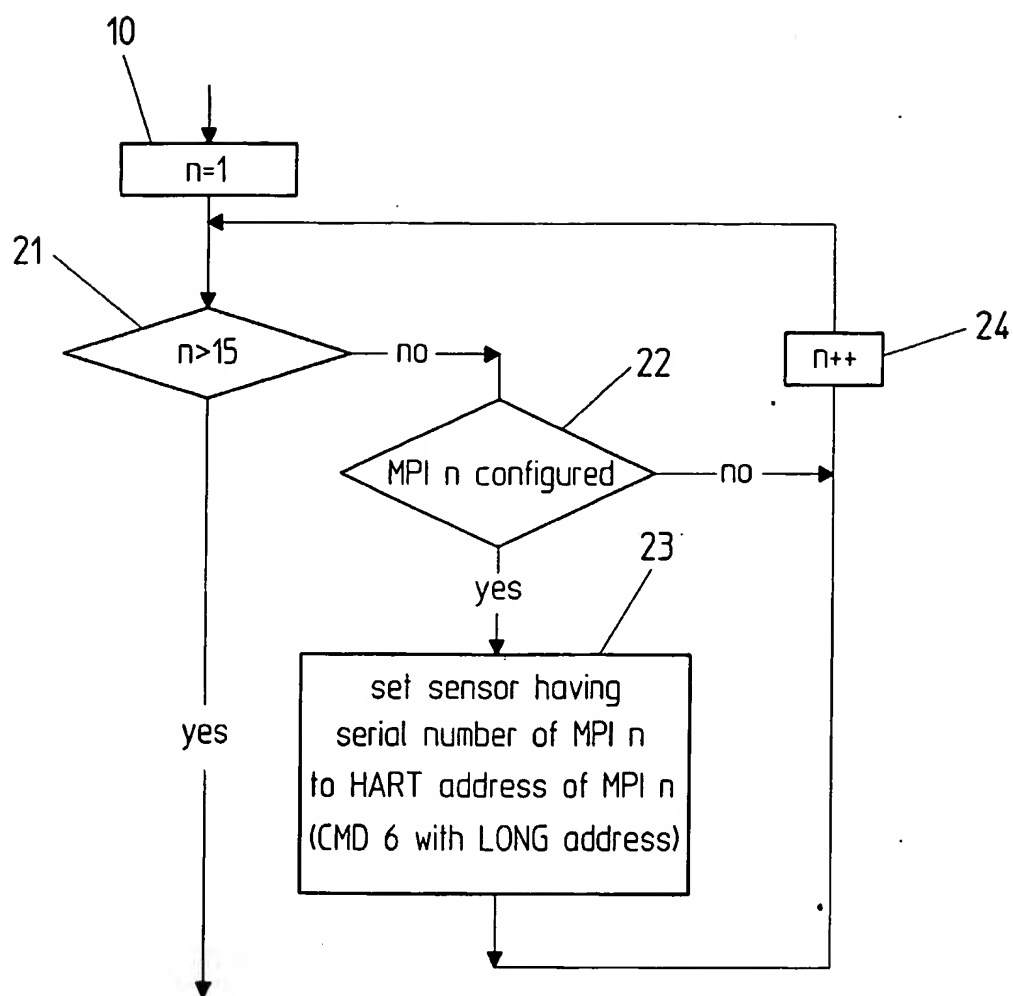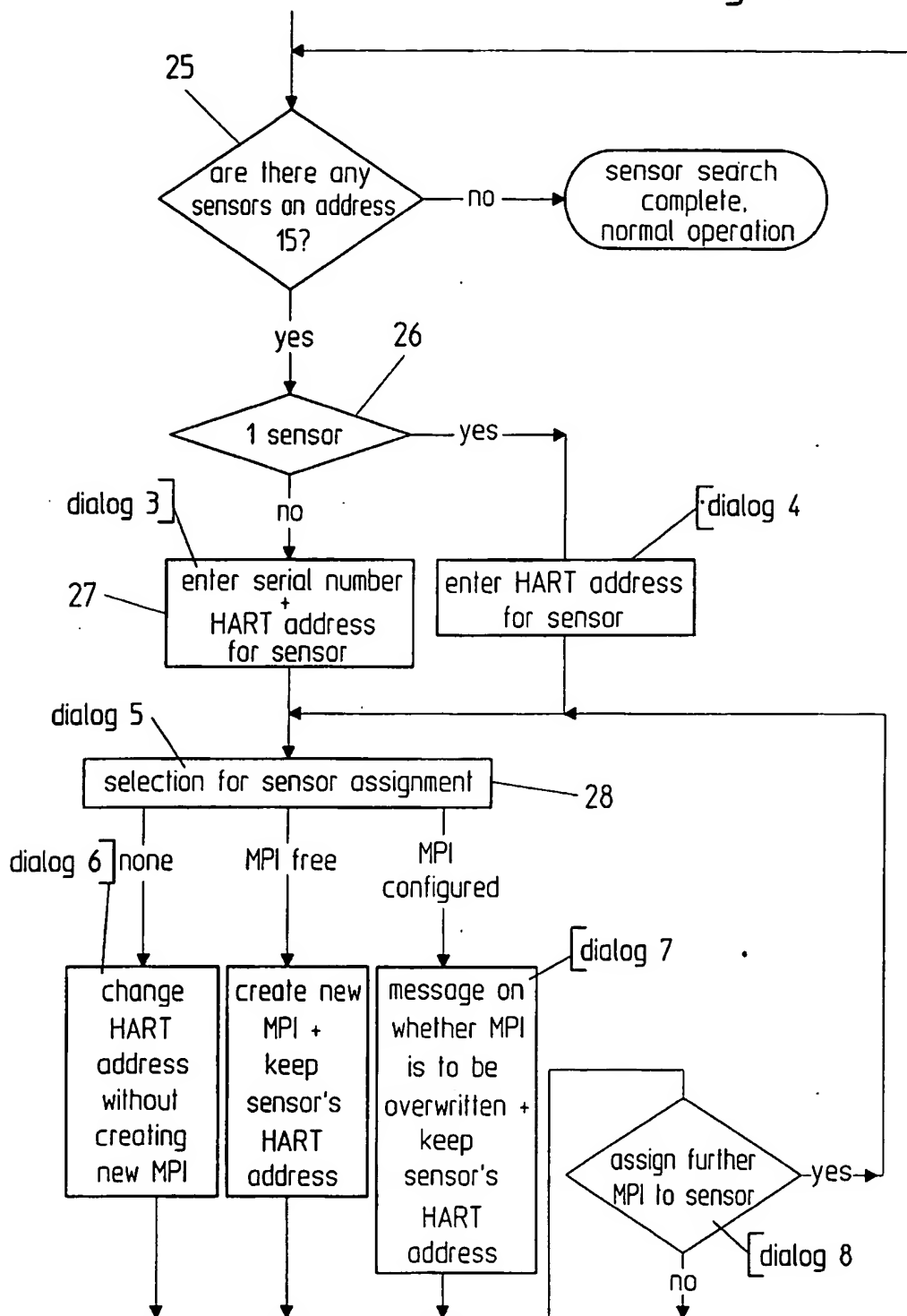# Fig. 2b

address configured sensors

Fig. 2c

address free sensors and assign MPI

Fig. 3

> # Error
>
> power interruption
> or no sensor connected
>
> E015

Fig. 4

> # Error
>
> short circuit
>
> E014

Fig. 5

> sensor addressing
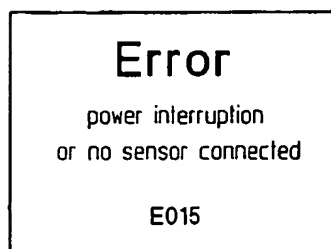>
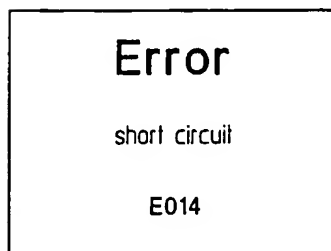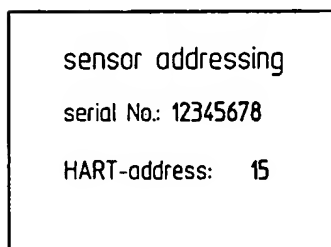> serial No.: 12345678
>
> HART-address: 15

Fig. 6

sensor address

0

Fig. 7

sensor association

MPI1 (configured)   ▼

list selection:

MPI1 (configured / free)
MPI2 (configured / free)
none

Fig. 8

sensor addressing

serial number: 12345678
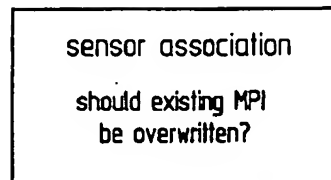
HART-address: 15

Fig. 9

```
sensor association

should existing MPI
be overwritten?
```

Fig. 10

```
sensor association

assign further MPI
to sensor?
```